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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/733,533 12/11/2003 Blake C. Chenevert EH-10965 (03-435) 7730 07/11/2005 **EXAMINER** 34704 7590 BACHMAN & LAPOINTE, P.C. COCKS, JOSIAH C 900 CHAPEL STREET ART UNIT PAPER NUMBER **SUITE 1201** NEW HAVEN, CT 06510 3749

DATE MAILED: 07/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/733,533	CHENEVERT ET AL.
	Examiner	Art Unit
	Josiah Cocks	3749
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).		
Status		
1) Responsive to communication(s) filed on April	28, 2005.	
,— · · · · _—	action is non-final.	
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is		
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.		
Disposition of Claims		
4) Claim(s) 1-25 is/are pending in the application	•	
4a) Of the above claim(s) <u>1-11</u> is/are withdrawn from consideration.		
5) Claim(s) is/are allowed.		
6)⊠ Claim(s) <u>12-23</u> is/are rejected.		
7) Claim(s) <u>24 and 25</u> is/are objected to.		
8) Claim(s) are subject to restriction and/o	r election requirement.	
Application Papers	-91	
9)☐ The specification is objected to by the Examine	er.	
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.		
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).		
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).		
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.		
Priority under 35 U.S.C. § 119		
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>		
Attachment(s)  1) Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)</li> <li>Paper No(s)/Mail Date <u>5/19/2005</u>.</li> </ul>	Paper No(s)/Mail D	

#### **DETAILED ACTION**

### Response to Amendment

1. Receipt of applicant's amendment filed 4/28/2005 is acknowledged.

#### Election/Restrictions

2. Applicant's election with traverse of Group II including claims 12-16, drawn to a method of cleaning using combustion gases, in the reply filed on 4/28/2005 is acknowledged. The traversal is on the ground(s) that the examination of both the method of Group I, including claims drawn to an apparatus for providing detonative cleaning and Group II would not present an undue burden on the examiner. This is not found persuasive because the two groups include classification searches that do not overlap. Further, as indicated in the Office action mailed 3/10/2005, the inventions were demonstrated to be distinct.

The requirement is still deemed proper and is therefore made FINAL.

This application contains claims 1-11 drawn to an invention nonelected with traverse in the response filed 4/28/2005. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

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## Information Disclosure Statement

4. The information disclosure statement (IDS) submitted on 5/19/2005 was filed after the mailing date of the first Office action on the merits on 3/10/2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 7. Claims 12-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,277,153 to Kakabaker ("Kakabaker") in view of U.S. Patent No. 4,333,742 to Tanca

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("Tanca") and Japanese Patent No. 2003-269887 ("Japanese patent") (submitted in IDS filed 5/19/2005) (noted: a computer translation of this document is included with this Office action)

Kakabaker discloses in Figures 1-4 a method for cleaning a vessel of a fuel burning power plat or similar boiler similar to that described in applicant's claims 12-23. In particular, Kakabaker describes a vessel that receives a soot blower device through an access opening (see col. 1, lines 14-20). The soot blower device includes an insertion portion that is inserted into the vessel and forms a seal by means of a seal-bearing arrangement (41). The soot blowing devices includes a valve (16) that is opened to release superheated steam into the vessel, after-which the device is withdrawn from the conduit (see col. 6, line 53 through col. 7, line 5). Valve (16) is considered to be the second valve recited in applicant's claims.

In regard to the recitation of a first valve, Kakabaker does not provided any detail as to a mechanism or valve with means for sealing off the soot blower from the vessel when the soot blower is withdrawn. However, the Japanese patent is cited to remedy the deficiency. The Japanese patent shows a retractable soot blower in the same field of endeavor as Kakabaker. In the Japanese patent, a valve (3) is included between a vessel and the soot blower (see Fig. 1). This valve is termed an insertion latching valve (see computer translation paragraph [0049]) that functions to seal the soot blower from a vessel when the soot blower is retracted (see translation, paragraphs [0035] and [0052]). Alternatively, the masking door (35) meets the limitation of applicant's valve. This masking door (35) is further shown to be a pivoting type assembly. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Kakabaker to incorporate a valve as taught in the Japanese patent to desirably seal off the soot blower from a vessel when the soot blower is retracted.

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In regard to claim 16, OFFICIAL NOTICE was taken in the prior Office action that valves being manually opened are well known in the art. The examiner stated that a person of ordinary skill in the art would reasonably select well known valve types for those disclosed in Kakabaker. This knowledge in the art of manual valve operation was not disputed by applicant and is now considered to be admitted prior art.

In regard to the limitations of the claims pertaining to timed opening of the valves, the examiner considers that the valves would be opened and closed as necessary to accomplish the purpose of cleaning the vessel. A person of ordinary skill in the art would select appropriate valve opening times through routine experimentation in order to optimize the cleaning process. Therefore, the selection of an optimum time for opening the valve would be is not patentably distinct. See MPEP § 2144.05(II)(A).

Kakabaker discloses the use of superheated steam as the cleaning fluid, but possibly does not disclose the use of combustion gases as recited in applicant's claims.

Tranca teaches a soot blower in the same field of endeavor as Kakabaker. In Tranca, a soot blower employs combustion fuel gases for cleaning (see col. 1, line 57 through col. 2, line 8). Tranca also acknowledges that it is under stood in the art that combustion product/flue gases may also be used as the cleaning fluid (see col. 1, lines 23-27). These combustion fuel gases and combustible produce gases disclosed are considered to be the combustion gases, and fuel/oxidizer mixture claimed. Further, these combustion fuel gases would serve to "detonate" when ignited

Therefore, in regard to claim 12-23, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the method of cleaning step of using

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superheated steam of Kakabaker to incorporate the step of using either combustion fuel gases or combustion product/flue gases as taught by Tranca as such gases are understood in the art to be satisfactory in dislodging built-up residue (see Tranca, col. 1, lines 23-27) and in the case of combustion fuel gases, desirably preserve the heating value of the fuel gas when the device is used in a coal gasifier (see Tranca, col. 3, lines 3-9).

### Allowable Subject Matter

8. Claims 24 and 25 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### Conclusion

9. Applicant's amendment and submission of an information disclosure statement under 37 CFR 1.97(c) prompted the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. U.S. Patents to Enoksson et al. and Parkes are cited to further show the state of the art concerning valve types and methods of cleaning use explosive gas.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Josiah Cocks whose telephone number is (571) 272-4874. The examiner can normally be reached on weekdays from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus, can be reached at (571) 272-4877. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <a href="http://portal.uspto.gov/external/portal/pair">http://portal.uspto.gov/external/portal/pair</a>. Any questions on access to the Private PAIR system should be directed to the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

jcc July 8, 2005

JOSIAH COCKS
PRIMARY EXAMINER
ART UNIT 3749